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U.S. Geological Survey
Biological Resources Division
Western Fisheries Research Center
COLUMBIA RIVER RESEARCH LABORATORY
5501A Cook-Underwood Rd.
Cook, Washington 98605

1. Name:

James R. Hatten

2. Present Position:

Geographer, GS-150-11
GIS Coordinator
Columbia River Research Laboratory
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3. Education and Training:

<u>Degree</u>		<u>Date</u>	<u>School</u>
B.S.	Environmental Studies	1984	Western Washington University
M.A	Geography	1996	Northern Arizona University

Government courses in Fisheries Habitat Inventory and Monitoring Techniques, 40 hrs, 1989 through 1992

Government course in wetland delineation, 16 hrs, 1989

Government course in Metadata Training, 16 hours, 1998

ERDAS courses in Advanced Image Processing, Multispectral Classification, and Map Composition, 40 hrs, 1999

College courses in Visual Basic Programming (Introduction, Business applications, COM/ActiveX), 9 semester hours, 1999 – 2000

Government courses in Leadership, Conflict Resolution, Mentoring, Supervision, 40 hrs, 2002

Government course in Contracting Officer Technical Representative, 24 hrs, 2002

4. Experience:

Fisheries Biologist, Foreign Fishery Observer, NMFS, 1984-87

Timber/Fish/Wildlife (TFW) Biologist, Hoh Indian Tribe, 1988-1994

GIS Coordinator/Analyst, Peabody Western Coal Company, 1995-97

Senior GIS Analyst, Arizona Game and Fish Department, 1997-2001

Geographer, GIS Coordinator, USGS/BRD, Columbia River Research Laboratory

5. Research Specialties:

GIS/Spatial Analysis

Cell-based modeling

Biogeography

6. Special Assignments, Appointments, etc.:

Hoh River Basin Resource Management Planning Group, 1991-94

Washington State Water Quality Steering Committee, 1993-94

Hoh River Basin Slope Stability Task Force, 1992-93

Hoh River Basin Road Stability Task Force, 1992-93

Little Colorado River Core Management Planning Group, Arizona Game and Fish Department, 1998-2000

7. Current Research Assignments:

Examining the potential impacts of contaminants on endangered salmonids in the Lower Columbia River Basin.

8. Notable Achievements and Research Accomplishments:

Developed an environmental program for the Hoh Indian Tribe to monitor water quality and fisheries habitat in the Hoh River Basin

Identified 13 water-quality impaired streams in the Hoh River Basin

Created 12 water-quality monitoring reaches and dozens of permanent transects in Olympic National Park

Identified critical habitat for the endangered Mount Graham red squirrel in Arizona and developed management recommendations

Created a jaguar habitat suitability model in Arizona

Mapped the entire state of Arizona for potential jaguar habitat

Created a GIS-based model of Southwestern Willow Flycatcher breeding habitat

Mapped the entire state of Arizona (at 30-m resolution) for potential Southwestern Willow Flycatcher breeding habitat

Created geomorphic suitability models for 4 native and 17 exotic fishes of the Little Colorado River Basin, Arizona

Mapped potentially suitable habitats for 4 native fishes in drainages of the Little Colorado River Basin, Arizona

9. Awards, Honors, and Other Recognition:

Special Achievement Award, Washington State Department of Natural Resources, for my participation in the Hoh Resource Management Plan, 1994.

Special Achievement Award, Washington State Department of Ecology, for my development of a water quality monitoring program and participation in the Hoh Resource Management Plan, 1994

10. Professional Societies and Offices Held:

American Association of Geographers

11. Publications, Reports, and Other Public Expression:

a. Publications

- Hatten, J.R. and R. Conrad. 1995. A comparison of summer stream temperatures in unmanaged and managed sub-basins of Washington's western Olympic Peninsula. Project Report Series #4, Northwest Indian Fisheries Commission, Olympia, WA. 52 pp.
- Hatten, J.R. 2000. A pattern recognition model for the Mount Graham red squirrel. AGFD, Nongame and Endangered Wildlife Program Technical Report 160, Phoenix, AZ. 32 pp.
- Hatten, J.R. 2001. Cell-based fisheries habitat modeling. Chapter 3 in: The integrated fisheries management plan for the Little Colorado River Basin. AGFD, Nongame and Endangered Wildlife Program Technical Report 146, Phoenix, AZ. 52 pp.
- Hatten, J.R., L. Averill-Murray and B. Van Pelt. 2003. Characterizing and mapping potential jaguar habitat in Arizona. AGFD, Nongame and Endangered Wildlife Program Technical Report 203, Phoenix, AZ.
- Hatten, J.R. and C. Paradzick. 2003. A multiscaled model of southwestern willow flycatcher breeding habitat. In prep: Journal of Wildlife Management.

b. Reports

- Hatten, J.R. 1991. The effects of debris torrents on spawning gravel quality in tributary basins and side-channels of the Hoh River, Washington. Unpublished report, Hoh Indian Tribe, Forks, WA. 19 pp.
- Hatten, J.R. 1996. Relationships between basin morphology and large woody debris in unlogged stream channels of Washington's Olympic Peninsula. Unpublished report, Hoh Indian Tribe, Forks, WA. 43 pp.
- Hatten, J.R., C. Paradzick and M. Sumner. 2000. Developing a habitat suitability model for the southwestern willow flycatcher: A Study Plan. Unpublished report. AGFD, Nongame and Endangered Wildlife Program, Phoenix, AZ. 50 pp.
- Hatten, J.R., C. Paradzick and T. McCarthy. 2001. Mapping and monitoring southwestern willow flycatcher breeding habitat in Arizona: a study plan. AGFD, Nongame and Endangered Wildlife Program Unpublished Report, Phoenix, AZ. 18 pp.

c. Other Public Expressions

- Hatten, James. 1992. Tracing Non-point Pollution Sources. Oral presentation, Pacific Northwest Rivers Conference, Seattle, WA. 1991.
- Hatten, James. 1992. Status of Coastal Habitat. Oral presentation, Northwest Indian Fisheries Commission Annual Meeting, Ocean Shores, WA. 1993.

Hatten, James. 1994. Impacts of Forest Roads on Water Quality and Salmon Spawning Habitat in the Hoh River Basin. Oral presentation, Department of Natural Resources, Forest Engineering Department, Olympia, WA. 1994.

Hatten, James and C. Paradzick. The Ecology and Conservation of the Willow Flycatcher. Oral presentation, Arizona State University, Phoenix, AZ. 200.

d. Masters Thesis

Hatten, J.R. 1996. Evaluation of panchromatic imagery for riparian classification and change detection. Master's thesis, Northern Arizona University, Flagstaff, AZ. 105 pp.